

**ABSTRACT**

A method for dividing a display into zones at system initialization for tracking which zones have any pixels revised so that, when the time comes to update the display, only the zones requiring revision (that is, those zones in which any pixel has been revised) are copied from shadow memory to the frame buffer for display on the display device. The memory for tracking these zones can be allocated at initialization and held since it is relatively small. Consequently, a significant performance gain may be achieved by avoiding the shortcomings of the existing methods in the art notwithstanding the fact that some "clean" pixels in each zone having even a single changed pixel are also rewritten to the frame buffer.